ABSTRACT OF THE DISCLOSURE

An engine control unit (ECU) of an internal combustion engine performs energy changing control for changing a charging amount (an upper limit value of charging voltage, charging speed or target energy) to a piezo stack of a piezo injector in accordance with common rail pressure. During the energy changing control, the ECU contracts a command injection period as the target energy charged to the piezo stack increases so that actual injection end timing or valve closing timing of a nozzle portion is unchanged even if the target energy is changed. Meanwhile, the ECU delays command injection timing as the target energy increases so that actual injection start timing or valve opening timing of the nozzle portion is unchanged even if the target energy is changed.

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